

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COM COMMERCE United States Patent and Trademark O Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

# NOTICE OF ALLOWANCE AND FEE(S) DUE

27076

10/21/2003

DORSEY & WHITNEY LLP INTELLECTUAL PROPERTY DEPARTMENT **SUITE 3400** 1420 FIFTH AVENUE SEATTLE, WA 98101

**EXAMINER** DIAZ, JOSE R

PAPER NUMBER

ART UNIT 2815

DATE MAILED: 10/21/2003

		 	<u> </u>		
APP	LICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
•	09/652,993	08/31/2000	Vishnu K. Agarwal	 98-0616.03	4012

TITLE OF INVENTION: DEVICE AND METHOD FOR PROTECTING AGAINST OXIDATION OF A CONDUCTIVE LAYER IN SAID DEVICE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$0	\$1330	01/21/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATEN PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHT THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPO PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM TH MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOV REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (O AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WIL BE REGARDED AS ABANDONED.

#### HOW TO REPLY TO THIS NOTICE:

1. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
- B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is n claiming SMALL ENTITY status, check the box below and enclo the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) w your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

(703) 746-4000 or Fax

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed wh appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address

indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new maintenance fee notifications.	v correspondence address; and/or (b) indicating a separate "FEE ADDRESS"
CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up, with any corrections or use Block 1)	Natural Annual France Constitution and Advantage

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10/21/2003

DORSEY & WHITNEY LLP INTELLECTUAL PROPERTY DEPARTMENT **SUITE 3400** 1420 FIFTH AVENUE **SEATTLE, WA 98101** 

Note: A certificate of mailing can only be used for domestic mailings of Fee(s) Transmittal. This certificate cannot be used for any other accompany papers. Each additional paper, such as an assignment or formal drawing, m have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the Un
States Postal Service with sufficient postage for first class mail in an envel
addressed to the Mail Stop ISSUE FEE address above, or being facsir
transmitted to the USPTO, on the date indicated below.

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(Signat
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APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/652,993	08/31/2000	•	Vishnu K. Agarwal	98-0616.03	4012

TITLE OF INVENTION: DEVICE AND METHOD FOR PROTECTING AGAINST OXIDATION OF A CONDUCTIVE LAYER IN SAID DEVICE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	3	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	•	\$0	\$1330	01/21/2004
EXAMINER		ART UNIT		CLASS-SUBCLASS		
DIAZ, JOSE R 2				438-238000		
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.				nting on the patent front page, up to 3 registered patent at R, alternatively, (2) the name of ing as a member a registered at the names of up to 2 registe or agents. If no name is listed nted.	torneys or 1 of a single attorney or 2 ared patent	

ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will a	not be printed on the patent);	individual	Corporation or other private group entity	o governm
4a. The following fee(s) are enclosed:	4b. Payment of Fee(s):			
☐ Issue Fee	☐ A check in the amo	int of the fee(s)	is enclosed.	
☐ Publication Fee	Payment by credit of	ard. Form PTO-	2038 is attached.	
☐ Advance Order - # of Copies	☐ The Director is her Deposit Account Num	eby authorized ber	by charge the required fee(s), or credit any enclose an extra copy of this	overpayment form).
Director for Patents is requested to apply the Issue Fee and Publica	ation Fee (if any) or to re-apply	any previously r	aid issue fee to the application identified above	1/8

(Authorized Signature)

(Date)

NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/652,993	08/31/2000	Vishnu K. Agarwal	98-0616.03	4012	
27076	7590 10/21/2003	EXAMINER			
	HITNEY LLP	DIAZ, JOSE R			
SUITE 3400	L PROPERTY DEPART	ART UNIT	PAPER NUMBER		
1420 FIFTH AVENUE			2815		
SEATTLE, WA	98101	DATE MAILED: 10/21/2003			

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after t mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a ha months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date th determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retriev (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.



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27076	7590 10/21/2003		EXAMI	INER
DORSEY & WI			DIAZ, Jo	OSE R
SUITE 3400	L PROPERTY DEPART	TMENT	ART UNIT	PAPER NUMBER
1420 FIFTH AVE	- · <del>-</del> -		2815	
SEATTLE, WA 9	8101		DATE MAILED: 10/21/2003	3

### Notice of Fee Increase on October 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after October 1, 2003, then t amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be increase in fees effective on October 1, 2003. See Revision of Patent Fees for Fiscal Year 2004; Final Rule, 68 Fe Reg. 41532, 41533, 41534 (July 14, 2003).

The current fee schedule is accessible from (http://www.uspto.gov/main/howtofees.htm).

If the fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due" but not the correct amount in vie of the fee increase, a "Notice of Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processi delays associated with mailing of a "Notice of Pay Balance of Issue Fee," if the response to the Notice of Allowan is to be filed on or after October 1, 2003 (or mailed with a certificate of mailing on or after October 1, 2003), t issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and t response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to t issue fee now due, then the difference between the issue fee amount at the time the response is filed and t previously-paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eigh Edition, August 2001).

Effective October 1, 2003, 37 CFR 1.18 is amended by revising paragraphs (a) through (c) to read as set forth below Section 1.18 Patent post allowance (including issue) fees.

(a) Issue fee for issuing each original or reissue patent, except a design or plant patent:

(b) Issue fee for issuing a design patent:

(c) Issue fee for issuing a plant patent:

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of t Office of Patent Publication at (703) 305-8283.

	Application No.	Applicant(s)					
	09/652,993	AGARWAL, VISHNU K.					
Notice of Allowability	Examiner	Art Unit					
·	José R Díaz	2815					
	JUSE IX DIAZ	2010					
The MAILING DATE of this communication apperall claims being allowable, PROSECUTION ON THE MERITS IS therewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI	(OR REMAINS) CLOSED in this apport or other appropriate communication GHTS. This application is subject to	plication. If not included will be mailed in due course. THIS	ve				
. ☑ This communication is responsive to <u>7/29/03</u> . 2. ☑ The allowed claim(s) is/are <u>4,76,77,81-85 and 89-92</u> .							
3. The drawings filed on 31 August 2000 are accepted by the	Examiner.						
<ol> <li>Acknowledgment is made of a claim for foreign priority und</li> <li>a) ☐ All b) ☐ Some* c) ☐ None of the:</li> </ol>	ler 35 U.S.C. § 119(a)-(d) or (f).						
<ol> <li>Certified copies of the priority documents have</li> </ol>	been received.						
<ol><li>Certified copies of the priority documents have</li></ol>							
3. Copies of the certified copies of the priority do	cuments have been received in this	national stage application from the					
International Bureau (PCT Rule 17.2(a)).							
<ul> <li>Certified copies not received:</li> <li>Acknowledgment is made of a claim for domestic priority units.</li> </ul>	ador 35 I I S C & 110(a) (to a provisi	onal application)					
<ol> <li>Acknowledgment is made of a claim for domestic priority dispersion.</li> <li>(a) ☐ The translation of the foreign language provisional a</li> </ol>		onal applications.					
6. Acknowledgment is made of a claim for domestic priority up							
Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT of	this communication to file a reply contribution that the second this application. THIS THREE-MO	omplying with the requirements noted NTH PERIOD IS NOT EXTENDABL	d .E.				
7. A SUBSTITUTE OATH OR DECLARATION must be submINFORMAL PATENT APPLICATION (PTO-152) which gives reas							
<ol> <li>CORRECTED DRAWINGS must be submitted.</li> <li>(a) ☐ including changes required by the Notice of Draftspers</li> <li>1) ☐ hereto or 2) ☐ to Paper No</li> </ol>	son's Patent Drawing Review ( PTO	-948) attached					
(b) $\square$ including changes required by the proposed drawing $\alpha$	· · · · · · · · · · · · · · · · · · ·	een approved by the Examiner.					
(c) including changes required by the attached Examiner	s Amendment / Comment or in the	Office action of Paper No					
Identifying indicia such as the application number (see 37 CFR 1 each sheet.	84(c)) should be written on the drawin	ngs in the front (not the back) of					
9.   DEPOSIT OF and/or INFORMATION about the depo- attached Examiner's comment regarding REQUIREMENT FOR T							
Attachment(s)							
<ul> <li>1 ☐ Notice of References Cited (PTO-892)</li> <li>3 ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>5 ☐ Information Disclosure Statements (PTO-1449), Paper No. 2</li> <li>7 ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ul>	4∏ Interview Summ 8. 6∏ Examiner's Ame	al Patent Application (PTO-152) ary (PTO-413), Paper No indment/Comment ement of Reasons for Allowance					

Application/Control Number: 09/652,993

Art Unit: 2815

#### **DETAILED ACTION**

#### Reasons for Allowance

The following is an examiner's statement of reasons for allowance: the prior art fails to teach, disclose, or suggest, either alone or in combination, a method comprising the step of: treating a first conductive layer, e.g. tungsten nitride layer, with methylsilane to passivate the surface of said first conductive layer or tungsten nitride layer to reduce the ability of said first conductive layer or tungsten nitride layer to associate with oxygen.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to José R Díaz whose telephone number is (703) 308-6078. The examiner can normally be reached on 9:00-5:00 Monday, Tuesday, Thursday and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on (703) 308-2772. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Art Unit: 2815

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

JRD

GEORGE ECKENNER PRIMARY EXAMINER